## The original documents are located in Box 3, folder "Aircraft Noise - Meeting with Secretary Coleman, Jim Lynn and Judy Hope, July 19, 1976" of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

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NOISE MEETING Secretary Coleman, Jim Lynn, Judy Hope Monday, July 19, 1976 9:00 a.m.

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# DEPARTMENT OF TRANSPORTATION AVIATION NOISE FINANCING

DOT recommends a financing plan with the following key elements:

1. CAB would be asked to approve, and the Executive Branch would support (perhaps with an expression of Congressional desire), an across the board surcharge for 10 years of 2% on domestic passenger tickets and freight waybills. The airlines would be required to deposit the revenues from the surcharge in an Aircraft Replacement Fund.

## Effect:

About \$3 billion (in inflated dollars) would flow into the Aircraft
Replacement Fund over 10 years. This amount would finance approximately
one-half of the cost (roughly \$6.4 billion) of some 200 to 275 of the B-707s
and DC-8s that would otherwise be in airline service at the end of 1984,
when the noise standard applies to those aircraft.\*

2. The Aircraft Replacement Fund would be managed by intercarrier agreement under which each carrier would have entitlements to the Fund in proportion to its total system passenger and cargo revenue.

## Effect:

Administration of the Fund by the airlines would minimize federal involvement.

- 3. The federal air passenger ticket and freight waybill taxes would be reduced from 8% to 6%, and from 5% to 3%, respectively.
- \* The amount of \$3 billion to be collected through the surcharge has been chosen because it is the sum that commercial banks have indicated to the airline industry would be required to induce their participation in financing an early aircraft replacement program. DOT is, however, conducting an analysis to ascertain whether some lesser amount might induce the participation of the financial community. Upon completion of that analysis the recommendation as to the duration of the 2% surcharge will be adjusted so that the collection will yield the amount deemed necessary.

#### Effect:

The lower user taxes flowing into the Airport and Airway Trust

Fund would cover all outlays chargeable to the Fund under the

ADAP bill. (An amendment would be needed to permit the use of

uncommitted balances (\$1.4 billion) to finance the full annual authorizations

included in the ADAP Act.)

Once the pending ADAP bill is enacted without a tax reduction, unused Trust Fund balances would grow rapidly (to \$1.7 billion by 1979) and become a target for tax reductions or unjustified spending proposals.

From a national interest point of view, the use of these excess revenues to help meet environmental and broad economic objectives is a sound and defensible policy alternative.

- 4. Any balances remaining in the Fund after program objectives have been achieved would be deposited in the Airport and Airway Trust Fund and dedicated to noise control purposes (including land acquisitions and easements).
- 5. The cost of retrofitting two and three engine airplanes will be paid from the Airport and Airway Trust Fund.

## Effect:

About \$350 million (inflated dollars) will be taken from the Trust Fund for retrofit.

## Attachments:

- 1. Effect of Aircraft Replacement Fund on carriers' finances.
- 2. Estimated Aircraft Replacement Fund revenues, 1977-1986.
- 3. (A&B) -- Impact on airport/airway fund of lower tax rates.



## EFFECT OF AIRCRAFT REPLACEMENT FUND ON CARRIERS FINANCES -

## CARRIER CONTRIBUTION AND ENTITLEMENT (Dollars in millions)

<u>Carrier</u>	Passenger &	ibution (2% Waybill Sur 1977-1986)	charge-	Number of Non-Complying 707's & DC-8's	<u>En</u> 1	<u>[ota]</u> titlement]/	Entitlement less Contribution
<u>Trunk</u>				•			
American Braniff Continental Delta Eastern National Northwest Pan American Trans World United Western Total Trun	<u>&lt;</u>	\$ 424.8 119.8 132.5 384.0 357.1 83.2 162.3 28.7 319.4 598.3 126.2 \$ 2736.2		91 11 5 34 - - 10 79 90 100 23 443	•	377 124 112 299 342 75 171 353 379 469 109 2810	\$ ( 47.8) 4.2 ( 20.5) ( 85.0) ( 95.1) ( 8.2) 8.7 324.3 59.6 (129.3) ( 17.2) \$ 73.8
Local Service Allegheny Frontier North Central Ozark Piedmont Air West Southern Texas Internat	ional al Service	\$ 103.5 41.2 39.6 31.5 35.9 44.0 26.3 15.8 \$ 337.8	د کار ا د کار مسسر	- - - - -		80 37 34 28 28 36 25 17 287	\$ ( 23.5) ( 4.2) ( 5.6) ( 3.5) ( 7.9) ( 6.0) ( 1.3) 1.2 \$ ( 50.8)

<sup>1/</sup> Total entitlement is determined by distributing the funds collected among carriers, on the basis of the proportion that each carrier's system revenues bear to the total of all revenues collected by the carriers.

Carrier	Contribution (2% Passenger & Waybill Surcharge 10 Years, 1977-1986)	Number of Non-Complying 707's & DC-8's	Total Entitlement	Entitlement less Contribution
Cargo Flying Tiger Seab:ard Airlift	31.1 17.4 4.5	16 11 5	8 46 24	(23.1) 28.6 19.5
<u>Total Cargo</u> Other	\$53.0	<u>32</u>	<u>24</u> 78	25.0
Supplemental Carrie Intrastate Carriers Hawaiian		31 - -	92 42 11	43.8 (83.5) ( 3.8)
Aloha <u>Total Other</u>	11.5 \$200.0	<u>-</u> 3T	1 <u>7</u> 1 <u>52</u>	$\frac{(4.5)}{(48.0)}$
TOTAL	\$3327.0	495	3327.0	- 0 -
Other Carriers <sup>2</sup> /		<u>17</u>		
TOTAL		523		

<sup>2/</sup> Includes commercial operators and flying clubs. Revenue contribution and entitlements for these carriers are not provided due to lack of revenue data.

Attachment 2

## REVENUE COLLECTIONS - AIRCRAFT REPLACEMENT FUND

				. The second of $V_{ij}$				•			Ten	
•	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	Year Total	
RCRAFT REPLACEMENT FUND									-		,	
? Ticket Surcharge	224	244	258	271	284	303	322	341	360	377	2484	
2% Waybill Surcharge	_22	<u>26</u> .	28	32	36	38	38	40	40	42	342	
Total	246	<u>270</u>	206	303	320	341	<u>360</u>	381	400	419	3327	

## CASE A. EXISTING TAX STRUCTURE, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE

(In \$ Millions)

		,						
		1976	TQ	1977	1978	<u> 1979</u>	1980	1981
Beginni	ng Uncommitted Balance	889	1269	1378	1520	1693	1892	
Plus Tr	rust Fund Revenues	969	_ <u>254</u>	1046	•	_	-	2105
	·		——— <u> </u>	1040	1128	1205	<u>1268</u>	<u>1338</u>
Subt		. 1858	1523	2424	2648	2898	3160	3443
Less:	ADAP Maintenance F&E RE&D	412 - 250 68	103 - 62 18	525 250 250 77	555 275 250	590 300 250	625 325 250	. 3443
Subt	otal	1128	1340	1322	1 <u>85</u> 1483	9 <u>0</u> 1668	<u>95</u> 1865	
Plus Es	timated Interest *	141	38	198	210			
Produktion in the				50	<u> 210</u>	<u>224</u>	_240	
Enging (	Uncommitted Balance	1269	1378	1520	1693	1892	2105	

<sup>\*</sup> Interest for FY 1976 and the transition quarter is as shown in the FY 1977 Budget; interest thereafter is calculated at 8% of average cash balance.

Beginning Cash Balance Plus Revenues Less Expenses Ending Cash Balance Average Cash Balance	2013 239 2252	2393 71 2464	2502 - 56 2446	2644 - 37 2607	2817 - 25 2792	3016 - 27 2989	3229
Interest Balance Carried Forward	<u>141</u> 2393	38 2502	(2474) 198 2644	(2625) 210 2817	(2804) <u>224</u> 3016	(3002) 240 3229	

CASE. B. 6% PASSENGER TICKET TAX, 3% WAYBILL TAX, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE (In \$ Millions)

	1976	TQ	1977	1978	1979	1980	<u>1981</u>
Beginning Uncommitted Balance	889	1269	1378	1276	1165	1038	884
Plus Trust Fund Revenues	<u>969</u>	254	811	874	932	981	1035
Subtotal	1858	1523	2189	2150	2097	2019	1919
Less: ADAP Maintenance F&E RE&D	412 - 250 <u>68</u>	103 - 62 18	525 250 250 77	555 275 250 <u>85</u>	590 300 250 <u>90</u>	625 325 250 <u>95</u>	
Subtotal	1128	1340	1087	985	867	724	. ,
Plus Estimated Interest *	141	38	189	180	<u>171</u>	160	
Ending Uncommitted Balance	1269	1378	1276	1165	1038	884	

<sup>\*</sup> Interest for FY 1976 and the transition quarter is as shown in the FY 1977 Budget; interest thereafter is calculated at 8% of average cash balance.

Beginning Cash Balance Plus Revenues Less Expenses Ending Cash Balance	2013 239 2252	2393 71 2464	2502 -291 2211	2400 -291 2109	2289 -298 1991	2162 -314 1848	2008
Average Cash Balance Interest Balance Carried Forward	141 2393	38 2502	(2351) 189 2400	(2254) 180 2289	(2140) 171 2162	(2005) 160 2008	

TAB B

# ALTERNATIVE OPTIONS FOR AVIATION NOISE FINANCING

The following options might be considered as alternatives to DOT proposal to facilitate replacement and retrofit of aircraft that do not comply with the FAA noise standards:

## Option #1

1. CAB would be encouraged through an expression of legislative intent to permit an environmental surcharge of 2% on domestic passenger tickets and freight waybills for 5 years. Revenues from the surcharge would be placed in an escrow fund to be used primarily for replacement of 4 engine aircraft.

#### Effect:

About \$1.4 billion would be provided for the replacement fund over 5 years.

2. The replacement fund would be managed by the airlines under an inter-carrier agreement.

## Effect:

Administration of the replacement fund by the carriers would keep federal involvement to a minimum.

- 3. The replacement fund would be disbursed as follows:
  - - 50% would be distributed in cash to the participating airlines in proportion to the surcharges each contributes to the fund;
  - - 50% would be used as a loan guarantee fund with the

entitlement of each participating carrier computed on the basis
of its total system revenues. Loan guarantees would be authorized
up to three times the amount of each airline's entitlement.

#### Effect:

About \$1.4 billion in cash would be available to carriers.

Use of a loan guarantee fund enables carriers to obtain financing for new airplanes.

- 4. Any unused balance in the loan guarantee fund after all loans
  have been paid off will be placed in the Airport and Airways Trust Fund.
- 5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust Fund would be reduced by 2% for 5 years.

## Effect:

A reduction in the ticket tax to balance the surcharge prevents the cost of air transportation from increasing.

6. Appropriations would be authorized from the Airport and Airways

Trust Fund to pay the cost of retrofitting those non-FAR 36 aircraft

which the airlines elect to retain in domestic service, rather than replace

or retire them.

## Effect:

The cost of retrofitting 2/3 engine airplanes is estimated to be about \$350 million (in inflated dollars). If the airlines choose to retrofit the approximately 75 four-engine aircraft which may be economic to retrofit

then the cost would increase by \$225 million.

#### Option #2

1. The CAB would be encouraged to approve a 2% surcharge for 7 years on carriers' domestic passenger tickets and freight waybills.

Revenues from the surcharge would go into a replacement fund.

#### **Effect:**

About \$2 billion in revenues, 30% of the approximately \$6.4 billion needed to replace 4 engine airplanes would flow into the replacement fund.

2. The replacement fund, managed by the airlines under an inter-carrier agreement, would be distributed according to the amount each carrier contributes.

#### Effect:

Administration of the fund by carriers minimizes federal involvement.

Funds could be used for purchase of any type of new aircraft.

There would not be any cross subsidy or pooling of funds.

3. International carriers and the portion of a domestic carrier's airplanes used in international service (determined by the proportion its international revenues bear to total revenues) are exempt from the domestic standard and do not participate in the domestic Aircraft Replacement Fund.

#### Effect:

About one-third of TWA's and almost all of Pan Am's fleet would be exempted. The exempt portion of an American carrier's fleet would come within the international fund (6 below).

- 4. Any balance in the replacement fund at the end of the 7 year period would be placed in the Airport and Airways Trust Fund.
- 5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust would be reduced by 2% for 7 years.

#### Effect:

A reduction in the ticket tax that corresponds to the surcharge will not increase the cost of air transportation.

6. A surcharge on all international tickets and waybills would be collected to facilitate replacement of 4 engine airplanes in international service for both domestic and foreign carriers. A distribution formula would be worked out through ICAO.

## Effect:

Separation of domestic and international operations prevents uneven treatment of either domestic or foreign carriers.

7. Appropriations would be authorized from the uncommitted balance (\$1.4 billion) in Airport and Airways Trust Fund to pay for retrofit of 2/3 engine airplanes.

#### Option #3

1. Require the carriers to submit a plan within 6 months after a noise rule takes effect stating the number of airplanes they intend to retrofit and the number they intend to replace.

#### Effect:

The FAA, airframe manufacturers, and airlines will know the estimated demand for retrofit kits and new airplanes and can estimate the costs.

- 2. An escrow fund would be created and would receive moneys from two sources:
  - - the \$1.4 billion surplus in the Airport and Airways Trust Fund;
  - - a 1% surcharge approved by the CAB to be levied on domestic passenger tickets and freight waybills.

## Effect:

About \$2 billion would be placed in the fund in 5 years. Of this amount,

\$1.4 billion would be available immediately to be used for replacement.

The carriers would decide how they would meet the noise requirements.

- 3. Disburse the funds as follows:
- - Estimate the retrofit costs and set the amount necessary to meet them aside;
- - Allocate the funds remaining after retrofit equally among the airplanes to be replaced.

## Effect:

The total cost of retrofit (\$350 million in current dollars) would be covered.

About \$1.6 billion, approximately 25% of the amount needed to replace 4-engine airplanes (roughly \$6.4 billion), would be available for that purpose.



[ July 1976]

#### APPENDIX A

## FINANCIAL CONDITION OF THE TRUNK AIRLINE INDUSTRY

The ability of the airline industry to finance equipment replacement depends, as it would in any other industry, on its ability to generate funds internally (through depreciation and earnings) and/or externally (from the equity market and/or debt market). Table 1, following, projects sources and uses for the 1977-1984 period, using the specified economic and traffic assumptions.

## 1. <u>Internal Sources</u>

- As the table shows, depreciation will yield a total of \$10.0 billion through 1984. Aircraft sales will yield only about \$400 million, leaving the airlines \$18.7 billion short of their total needs of \$29.1 billion. This amount must be met through earnings, new loans, leases, or new equity financing. The cost of a realistic noise reduction program would increase the total need for funds by the end of 1984 by around 23 percent, to \$36 billion and would increase the deficit by around 36 percent, to \$25 billion.\*
- · Industry earnings are projected to range from \$.3 to \$.5 billion in 1976-1977 to \$.6 to \$.7 billion toward the end of the period,\*\* and could total about \$5 billion, which would leave a financing need of \$13.7 billion, or about \$21 billion when noise reduction costs are taken into account. This "gap" must be met through external sources -- the equity market and/or the debt market.

## 2. External Sources

. Because of the airlines' poor earnings record for the past 10 years (see Table 2) both the equity and debt markets have been effectively foreclosed to them for some time. Airline stocks have not been a recommended buy for much of this period, and are not being recommended as an investment for the future, except for possible short-term

<sup>\*\*</sup> To earn \$.5 billion, the industry would have to achieve about 9 percent to 10 percent ROI at current investment levels. Since 1967, ROI for the domestic trunks plus Pan American has ranged from a high of 8.5 percent to a low of 2.1 percent, averaging only 5.7 percent.



<sup>\*</sup> Assumes the cost of the replacement/retrofit program is in the middle of the \$5.6 to \$7.7 billion range.

gains in the next six months.\* At present, airline stocks stand at approximately 60 percent of their 1967 value (versus 120 percent for the Dow-Jones Average).

- The major source of airline debt financing through the 1960's-traditionally the large insurance companies-has been closed for six years. Under New York law, New York insurance companies are forbidden to make further loans. In a statement submitted to the House Public Works and Transportation Committee George Jenkins, Chairman of Metropolitan Life Insurance, said: "... we feel confident that Metropolitan will lose no money on its current airline investments as they run off, but under present conditions, no new money will be loaned." Before lenders will commit new debt capital, Jenkins added, "(they) will require a sound equity base and good profits ..."
- The DOT is confident that the proposed Aviation Act of 1976 will return the Aviation industry to long-term profitability and eliminate the capital expenditure problem of the future. However, no remedy is seen for the problem of funding the capital decisions that must be made now in order to achieve a quieter and more fuel efficient fleet by the end of 1984. Airline earnings are the key to both internal and external funds generation, but as the foregoing data makes clear even a high level of earnings will not insure that the industry will be able to finance ther \$5.6 to \$7.7 billion needed for the noise reduction program through normal means.

#### 3. Problem Carriers

The financing problems anticipated for the industry will be concentrated heavily in major carriers, which have the most fourengine aircraft in their fleet and consequently the greatest retrofit burden, particularly American, TWA, and Pan Am. As shown in Table 3, these three carriers have together accounted for a large portion of the industry's losses over the last five years and, with the possible exception of American, have relatively undesirable debt burdens. Further, as shown in Table 4, American and TWA, (presuming that they could obtain the debt financing they would need,) under the burden of the noise reduction program would have debt/equity ratios of over 4 and 5.7 respectively, while Pan Am's would be near 2. These carriers are likely to have great difficulty in raising the capital that would be required by the noise regulation.

<sup>\*</sup> A potential exception to this statement is the pending TWA issue of 2 million shares of stock. As explained in the text, the need for such an issue is created by TWA's poor financial situation and at the expected price of the sale will seriously dilute the company's equity base.

## TABLE 1

# PROJECTED USES AND SOURCES OF FUNDS U.S. TRUNK AIR CARRIERS 1977, 1980 AND 1984

## (Current Dollars in Billions)

Uses of Funds	<u>1977</u>	<u>1980</u>	1984	<u>1977-1984</u>
Property & Equipment Debt Repayment Dividends & Other	\$1.2B .5 .3	\$1.6B .5 .6	\$5.7B .4 	\$24.4B 3.6 1.1
Total Uses	<b>\$2.0</b> B	\$2.7B	<b>\$6.2</b> B	<b>\$29.1</b> B
Sources of Funds			·	•
Depreciation Sales of Aircraft	1.1	1.1	1.6 : <u>.1</u>	10.0
Total Sources	1.2	1.1	1.7	10.4
Uses Less Internal Sources	\$ .8B	\$1.6B	<b>\$4.5</b> B	<b>\$18.7</b> B

NOTE: The following growth rates are assumed in the projections:

Real GNP	3.7%
Inflation	5.1%
RPM's	
Domestic	6.5%
International	5.3%
System	6.2%

TABLE 2

SELECTED FINANCIAL DATA FOR TRUNK CARRIER INDUSTRY

(System Operations, Including Pan Am)
1967-1975

(Dollars in millions)

		Operating Revenue	Pre-Tax Profit	Pre-Tax <u>Profit Margin</u>	Return on Investment 1/
1967		\$6,117	\$638	10.4%	8.5%
1968		6,902	411	5.6	6.1
1969		7,765	247	3.2	4.6
1970		8,131	(154)	(1.9)	1.8
1971		8,811	55	0.6	3.7
1972		9,783	266	2.8	6.0
1973ء		10,905	. 287	2.6	5.6
1974		12,865	447	3.5	6.8
1975		13,374	(121)	(-)	2.8
	9 Yr. Total	\$84,653	\$2,076	2.5%	NA

<sup>1/</sup> Return element includes net income and interest on long term debt.

Source: CAB Form 41/TPI-32 Reports



TABLE 3

<u>SELECTED FINANCIAL DATA FOR TRUNK CARRIERS (Including Pan Am) 1971 TO 1975</u>

Carriers with Large Numbers of 4-Engine Aircraft	Operating Revenues (\$ Millions)	Net Income (Loss) (\$ Millions)	Profit (Loss) Margin (Percent)	Debt as a Proportion 1 of Total Capitalization (Percent)
Trans World	\$ 7,679.9	\$ (24.5)	(0.3)%	73.0%
American	7,583.5	(39.5)	(0.5)	45.4
United	9,681.2	155.6	1.6	48.2
Pan American	7,169.1	(233.9)	(3.3)	75 <b>.</b> 9
<u>Others</u>				
Eastern	6,629.2	(65.1)	(1.0)	68 <b>.</b> 2 ca
Delta	5,502.5	268.8	4.9	44.8
Braniff	2,281.3	93.1	4.1	57.7
Western	2,113.4	74.5	3.5	43.8
Northwest	2,984.8	. 203.5	6.8	28.3
Continental	2,081.4	21.3	1.0	71.7
National	1,821.1	82.3	4.5	46.7

Trunk Air Carriers - System Operations, December 31, 1975

TABLE 4

## PROJECTIONS OF DEBT EQUITY RATIOS, SELECTED TRUNK CARRIERS, 1976, 1989, AND 1984 (Dollars in Billions)

AIRLINE	ANTICIPATED CAPITAL EXPENDITURES (1977-1984)	LONG TERM EQUIT 1976 1980		ADDITIONAL REPLACEMENT CAPITAL REQUIRED BY 19842/	DEBT/EQUITY RATIO INCLUDING REPLACEMENT FINANCING (1984)
American	\$3-3.5	.78 .47	2.3	\$1.2	4.4
Pan Am	1.8	3.0 1.7	.74	1.0	2.17
TWA	\$23	3.0 2.2	2.8	1.5-2.0	5.77
United	4.2	1.1 .56	.34	2.0	1.52
Industry	\$27.1	1.3 .74	.98	5.6-7.7	1.78

SOURCE: Alliance One Institutional Services and TPI-32

- 1/ Assumes borrowings for capital needs without respect to carriers ability to obtain financing.
- 2/ Based on number of four-engine aircraft remaining in fleet after 1984, with replacements (including spares) valued at a 1982 cost of \$27 million each.

#### APPENDIX B

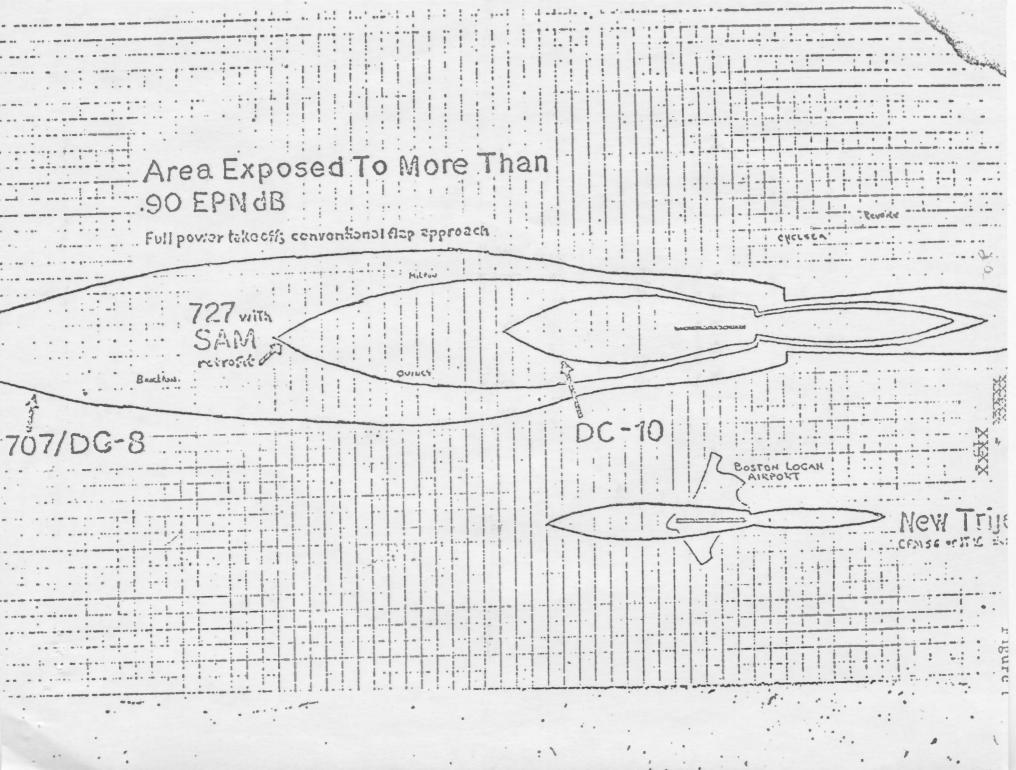
## ADVANTAGES OF ACCELERATED DEVELOPMENT OF NEW TECHNOLOGY AIRCRAFT

#### 1. Greater Noise Reduction

- A new-technology replacement aircraft would be far quieter than the quietest existing aircraft. The gain achievable is illustrated in Figure 1, which outlines the area exposed, on a single event, to a noise level equal to or greater than 90 EPNdB--roughly equivalent to the sound of a busy downtown street.
  - -- The 90 EPNdB contour of the 707/DC-8 aircraft (technology of the 1950's) extends more than 20 miles beyond the brake release point of takeoff and roughly nine miles prior to the touchdown point on landing.
  - -- The DC-10, employing the late 1960's technology CF-6 engine, is able to confine the 90 EPNdB contour to a much smaller area, equivalent to the over-water area south of Logan International. It is significantly quieter than a SAM retrofitted 727, which meets FAR 36 standards.
  - -- Further important noise reduction advances are reflected in the noise contour of a new Tri-jet which has double layer acoustical linings, and the 1970's technology CFM-56 or JT10D engines with new design fan and turbine stages. Those engines are expected to be available for use in new aircraft.

## 2. Productivity, Operating and Safety Gains

- Technological advances possible today will result in a new aircraft with greater payload for its size and weight—an aircraft that is more reliable, more easily maintained, costs less to operate, and costs less to acquire per unit of productivity. These benefits accrue to the public, the air traveler, and the airlines.
- Greater efficiencies are achieved through such technological advances as:
  - -- Supercritical aerodynamics concepts in wing airfoil and body design, which can yield a lighter and more efficient aircraft.
  - -- Lighter, more aerodynamic propulsion system and more efficient engines and nacelles.
  - -- Digital electronics for avionics systems and in-flight control to avoid engine abuse, improve navigation and approach precision, provide increased reliability, maintainability, safety and fuel efficiencies.



- New structural concepts, new materials, and computer-aided designs which will result in a lighter aircraft made up of fewer, less complex parts.
- The new aircraft will be safer for the air traveler, through improvements in inflight control, and new interior materials of much improved flammability/smoke/toxicity characteristics.
- The new aircraft will comply with the more rigorous engine pollutant standards set for 1979.
- The new aircraft, by virtue of improvements in systems and avionics, will be certified with a two-man flight deck crew--an important contribution to control of airline costs and hence ticket prices.
- · In terms of seats, range and operational characteristics, the new aircraft will be more closely attuned to marketing requirements of the late 1970's and mid 1980's. On many routes today the aircraft used are smaller than optimal, making additional flights necessary; on other routes aircraft of longer range than necessary are used, which incurs both weight and efficiency penalties. A market-matched aircraft would convert into increased airline efficiencies.
- The new aircraft will use computer-aided flight profile management, which increases aircraft, airport and airways system productivity.
- The new aircraft will accept the standardized interline cargo container (LD-3). This would allow much improved efficiency in the high growth air cargo industry, by avoiding much of the labor and handling costs, while interfacing efficiently with all-cargo and interline air cargo services.

## 3. Energy Savings

- Replacement of 707/DC-8 aircraft with new, high-technology aircraft would result in reduced energy consumption per seat mile flown. 1/ The estimated magnitudes of the savings from various noise reduction programs are shown below:
  - -- A program resulting in the retrofit of about 100 of the 707/DC-8 aircraft and replacement of the rest with new, high-technology aircraft would provide an energy saving of about 2.5 billion gallons of jet fuel--an energy cost saving of about \$900 million over the period of the program (1981-1986) at today's price.

This is based on comparison of the fleet mix that was estimated to result from implementation of the proposed programs with the fleet mix estimated to result in the event that no program were undertaken. The new, high-technology aircraft is estimated to be 30% more fuel efficient than a 707/DC-8 on a seat mile per gallon basis.

- -- A program resulting in the replacement of all 707/DC-8 aircraft with new, high-technology aircraft would provide an energy saving of about 2.8 billion gallons--a cost saving of over \$1 billion over the program period.
- -- A program resulting in the retrofit of all 707/DC-8 aircraft would impose an additional energy requirement of about 220 million gallons over the program period.
- -- It should also be noted that retrofit of the 727/737/DC-9 aircraft would not cause a measurable change in the energy requirement of the commercial aircraft fleet.
- -- The annual energy saving of the program would in 1986 amount to about 8% of the total jet fuel consumption of the commercial aircraft fleet.

## 4. Positive Impact on the U.S. Aerospace Industry

- The 2- to 3-year gap between expected development and accelerated development of a new-generation aircraft is significant for the national interest in general, but could be crucial for the U.S. aerospace industry. Lacking a market for a new plane -- and thus the opportunity to put their drawing-board technology to work -- the U.S. manufacturers already have lost some of the technological advantage they have always enjoyed over foreign competition.
- A potentially more critical loss is U.S. share of the world aerospace market. If delivery of a new aircraft is delayed to 1985, as appears likely absent the spur of a realistic noise reduction program, foreign competition -- with newer products to offer -- may secure their hold on a major share of the world market, and the U.S. industry may decline to a level from which it cannot easily recover.\*
- \* The economic impact on the aerospace industry and on the U.S. economy in general would be enormous. With sales of \$28 billion, and employment of around 950 thousand, the industry has been a major factor in the U.S. economy for nearly the last quarter century. Since 1968, however -- as a result of the problems of its client industry, the U.S. airlines, and a reduction in military purchases -- aerospace has experienced a very sharp decline:
  - -- Direct employment has declined 37 percent.
  - -- Industry payroll as a percent of all manufacturing payroll has declined 30 percent.

<sup>\*</sup> The domestic market is also at issue. In the absence of a new U.S. 180-to-200 passenger aircraft, U.S. airlines are looking at such foreign aircraft as the French-made A-300-B, which already developed is substantially cheaper -- though less efficient -- than a new generation U.S. aircraft would be.

- -- As a percent of GNP, aerospace industry sales have declined 42 percent.
- -- Real aerospace industry sales have declined 37 percent.
- As the real domestic and military markets have declined, U.S. manufacturers have grown heavily dependent on foreign markets for sales of civil aircraft. Since 1968 civil aircraft exports as a percentage of total civil aircraft sales have almost doubled. U.S. airframe and engine manufacturers have turned more and more to consortiums with European firms, both to share developmental costs and to ensure continued access to European markets. However, the consequent sharing of production will further erode U.S. aerospace employment.\*
- Anxious to reduce U.S. dominance of the lucrative aerospace market, foreign governments have become increasingly protective of their own aerospace industries and markets, and increasingly aggressive about penetrating other markets, forming alliances where necessary to do so (the French and German combined forces to produce the successful A-300-B). Thus, while the U.S. aerospace industry has been declining in real terms, European and other foreign governments have been subsidizing expansion of their own aerospace industries, and threaten to encroach on both the U.S. and world markets. A loss of only 5 percent of present U.S. sales to foreign competition would result in a loss of 47,000 jobs and \$729 million in payroll.
- Assuming that past relationships hold true, the proposed program would accelerate by 2 to 3 years the rehiring of about 25,000 aerospace workers at a payroll of about \$400 million a year.

<sup>\*</sup> An important consideration here is the effect erosion would have on the structure of the U.S. aerospace industry. The competition between the three major manufacturers has helped to establish and maintain U.S. technological superiority. If a sizable share of the world market is lost to foreign competition, one and possibly two manufacturers could suffer seriously.

#### BACKUP PAPER ON FINANCING AIRCRAFT NOISE REDUCTION

#### I. INTRODUCTION

- . There are four parts to the aircraft noise problem:
  - -- One, an unacceptably high level of noise at major U.S. airports, and the resultant pressure for a responsible Federal Government noise-reduction program.
  - Two, the inability of much of the airline industry to obtain conventional financing to undertake a noise reduction program.
  - -- Three, the present unavailability of new-generation aircraft as suitable replacements under the program.
  - -- Four, declining employment in the U.S. aerospace industry, and threatening encroachment of government subsidized foreign competition on the U.S. share of the world aerospace market.

#### II. DEFINITION OF THE PROBLEM

## A. The National Airport Noise Problem

- Aircraft noise has become a serious problem at seven key U.S. airports and a considerable irritation and annoyance at about one hundred more, derogating the quality of life for 6 to 7 million citizens. Pressure from airport operators and consumer groups compel action by the Federal Government in order to avoid:
  - -- Curfews at major airports, which would interfere with air commerce and disrupt our national air system by delaying mail and cargo, and requiring expensive and difficult repositioning and rescheduling of aircraft.
  - -- Billions of dollars in potential law suits and/or land acquisitions.
  - -- Federal preemption of local restrictions and the resultant Federal liability for claims against local airport operators.
- To correct the noise problem, DOT proposes issuance of a regulation requiring operators of the aircraft not meeting FAR 36 standards to comply with these standards within a 6- to 8-year period, depending on aircraft type, by retiring and replacing them except in the case of newer aircraft for which retrofit makes sense.

9-**9**5

- There are 2,148 jet aircraft in the U.S. commercial fleet today. Of these, 77 percent, or 1,654 planes, exceed FAR 36 standards. These consist of approximately 500 1960-vintage four-engine aircraft, 1,100 more recent two- and three-engine aircraft, and 50 early 747's. Relatively few of the noisy aircraft are found in the fleets of the all-cargo and supplemental carriers. The majority are owned by the trunk carriers; four trunks--American, Pan Am, TWA, and United--account for nearly two-thirds.
  - If all 1,654 noisy aircraft were retrofitted, the cost in today's dollars would range from approximately \$870 million to \$1.6 billion:
    - -- \$255 million for the 1,100 two- and three-engine aircraft (at an average cost of over \$200,000 per aircraft).
    - -- From \$600 million to \$1.3 billion for the approximately 500 four-engines (not including the 747's). The cost of these kits--which have not yet been developed--is estimated to range from \$1.2 million to \$4.5 million, depending on certain assumptions, the most important of which is the number of aircraft to be retrofitted. A reasonable estimate, assuming all four-engines were retrofitted, would be from \$1.2 million to \$2.5 million per aircraft. The higher unit cost, as compared to the two- and three-engine retrofit, is a function of the greater difficulty of retrofitting these planes, the larger number of engines, and the smaller numbers of planes involved.
    - -- The 50 747's would cost approximately \$13 million to retrofit.
- Retrofit is conceded to increase operating costs for most narrow-bodied four-engine aircraft, and it is expected the airlines will choose to replace rather than retrofit these aircraft. The kits are expensive and would add nothing to the useful life of the planes. The airlines have indicated it would be economically preferable to replace almost all with a quieter, more efficient aircraft, if one were available, contingent upon obtaining the necessary financing.
- Not all the four-engine aircraft in the fleet today will be in the fleet at the end of 1984. But not all will have been retired either. Between now and then, it is expected that the airlines will purchase on the order of 700 additional aircraft\* to meet

<sup>\*</sup> Projecting the composition of individual carrier fleets and the total U.S. fleet 8 years into the future is a difficult, complicated exercise, requiring considerable amounts of judgment as to carrier decisions, as well as quantitative data. The figures included in this paper are preliminary and may be revised; however, the relationships and the ranges are firmly established and can be used with reasonable confidence.

anticipated traffic growth and to replace worn out, uneconomic aircraft (additional requirements resulting from Federal noise reduction policies not included). Several points central to the program should be noted here:

- -- The airlines are not expected to need a significant number of new aircraft before 1980 or 1981. Existing aircraft, combined with orders currently on the books and supplemented only slightly by additional purchases, should handle projected traffic increases until then. In addition, because of their poor financial condition, some carriers will find it difficult to obtain financing for new equipment. For this and other reasons, the carriers can be expected to postpone replacement orders until they become absolutely necessary.
- -- On the other hand, to meet the 1984 noise regulation with a new technology aircraft, the airlines would have to place firm orders for such aircraft in the next 12 to 18 months. Thus, there is a gap of from 2 to 3 years between the investment decision the airlines would make in the normal course of events—absent a noise regulation—and the accelerated decision they must make to comply with the noise reduction program.
- -- Many of the noisy four-engine aircraft currently in the fleet will be retired under the airlines' anticipated schedule. But more than half--between 275 and 350--are expected to be still in the fleet by the end of 1984 (as cargo and charter aircraft, if not in passenger scheduled service). Most of these planes are, or soon will be, fully depreciated. However, the expense of retrofitting them, with kits ranging from \$1.2 million to \$4.5 million, would make continued operation in most cases uneconomic.

The cost of a realistic and economic program to meet the noise reduction requirement by 1984 has been estimated as follows:

- -- \$400 to \$450 million (in 1976 dollars) for retrofit of approximately 950 two- and three-engine aircraft, 50 747's, and approximately 75 four-engines that may be economical to retrofit.
- -- From \$4.0 to \$5.5 billion (in 1976 dollars) for accelerated replacement of the other 200 to 275 noisy four-engines expected to be in the fleet after 1984.
- -- If the airlines choose to retrofit none of the narrow- (170%) bodied four-engine aircraft then the cost of replacement

increases to a range of from \$5.5 billion to \$7 billion (in 1976 dollars).

- B. The Financial Situation of the Trunk Airline Industry\* (Detail in Appendix A).
- Although the national interest quite clearly compels a noise reduction program, the financial condition of the trunk airline industry, and in particular of certain companies within the industry, calls into serious doubt the industry's ability to finance such a program through conventional means.
- In the normal course of events, the airline industry will have to raise on the order of \$25 billion to \$30 billion (in inflated dollars) between now and 1985 in order to purchase an estimated 700 new aircraft that will be made necessary by traffic growth and obsolescence of existing aircraft, to repay debt, and for other miscellaneous capital expenditures.
- As is well known, the air carriers have had almost 10 years of very lean earnings (since 1967 an average pre-tax profit margin of 2.5 percent and ROI of 5.7 percent). There seems little doubt that for the last year or so (principally as a result of the 1974-75 economic recession combined with rapidly escalating costs) the industry's collective ability to finance any major capital acquisitions has been at an extreme low point, both in terms of its own history and as compared to other industries.
- Fortunately, the resurging economy is bringing the industry out of its doldrums and positive earnings are in sight for the next several years. The size of the existing fleet, with the addition of current orders, is sufficient to make the need for new aircraft investments relatively low through the period from 1976 to 1979. By the time substantial new aircraft capacity is needed, it seems likely that the industry will have redeveloped adequate financial strength to fund it. (This assumes no extraordinary financing needs and the help of regulatory reform.)
- . However, the realistic noise reduction program would add \$5.6 to \$7.7 billion (in inflated dollars) to the industry's capital requirement, which clearly constitutes an extraordinary financing

<sup>\*</sup> The focus of attention in this paper is on the financial condition of the trunk air carrier industry because the majority of the noisy aircraft, and virtually all of the noisy four-engine aircraft which should be replaced, are concentrated therein. Any financing options considered by either the industry or the government must of course take into account the fact that there are noisy aircraft owned by companies outside the trunk airline industry.

need.\* Capital needs would increase by 19 to 31 percent, from which the airlines would derive no direct traffic or revenue increases, and only slight capacity increases. An incremental requirement of this magnitude is beyond the near-term ability of the industry to finance in any normal fashion, since both the debt and equity markets have been foreclosed effectively for several years.\*\*

- Yet, to obtain delivery of new generation aircraft in time to comply with the regulation by 1984, the airline industry would have to accelerate its replacement schedule and make firm purchase commitments within the next 12 to 18 months. The industry very simply is not in adequate financial condition to make such commitments. It will begin to do so eventually, but too late to obtain the economically and environmentally efficient aircraft desired for the noise reduction program, to generate the jobs needed now in the aerospace industry, and to counter the competitive threat of new-technology foreign aircraft.\*\*\*
- Compounding the problem greatly is the financial condition of certain individual carriers within the industry. The use of aggregate data to analyze the ability of an industry to meet a specific financial need is often misleading. Individual companies, possessing a specialized knowledge of their own situation, can find ways around financial barriers that seem insurmountable to the industry analyst. In this case, however, the reverse is true. Several of the financially weakest carriers in the industry are also the owners of large numbers of

<sup>\*</sup> Assumes the combination of replacement and retrofit discussed earlier, with a 5 percent annual inflation rate and using 1982 prices. Excludes those four-engine aircraft possessed by other than the trunk airlines.

<sup>\*\*</sup>In hearings on the Aviation Act, the heads of several banks and insurance companies, the industry's traditional institutional lenders, testified that they did not anticipate making further loans to any carriers, and advised that capital formation was, and would continue to be, a critical problem for the industry.

<sup>\*\*\*</sup>An additional consideration is the potential impact of some approaches that have been proposed for dealing with the industry's re-equipment problem. Frank Borman, the CEO of Eastern Airlines, has recommended, for example, that the industry conduct a design competition, select a single new aircraft, and then agree to purchase that aircraft only. The consequences of such an approach for the competitive structure of the aerospace industry are serious.

noisy aircraft, and will face some of the largest requirements for funds with which to replace those aircraft.

- TWA, for example, has had an extremely difficult time remaining solvent over the past year and a half. In fact, having asked for and been refused Federal subsidy, it has avoided bankruptcy only through extraordinary efforts on the part of management and acquiescence on the part of its lenders. TWA's problems will not vanish overnight. Even though it will approach breakeven in 1976, and should see a return to profitability in 1977, the company is a few years away from being an effective competitor for funds in the capital marketplace.\* Yet by 1985, TWA probably will require from \$2 to \$3 billion in capital (in inflated dollars) merely to stay competitive and remain in business. The added cost of achieving noise reduction goals (that is, of replacing before 1985 those aircraft that would otherwise remain in its fleet) could increase TWA's capital needs by as much as \$1.5 to 2.0 billion (in inflated dollars) between now and then. Present projections say it is highly unlikely that TWA could finance independently such a tremendously increased capital requirement.
- Two of the other carriers strongly impacted by the noise regulation, Pan Am and American, also have had financial difficulties recently and would face similar problems in financing the purchase of replacement aircraft. Pan Am's capital requirements in the 1976 to 1984 period could increase on the order of \$1 billion (from around \$2 billion to as much as \$3 billion), as would American's (from around \$3 billion to around \$4 billion).
- C. The Need for a New-Generation Aircraft (Detail in Appendix B).
- No major new aircraft has been developed in the United States for almost 10 years. In that time important design and technological advances have been made -- many specifically to meet the new economic, operating, and environmental constraints dictated by rising labor costs, energy shortages, and changing market demands.

<sup>\*</sup> TWA's recent announcement that it plans to sell 2 million shares of common stock should not be construed as a sign of ability to compete in the capital marketplace. The company quite clearly has been forced into the sale by financial exigencies and as a result will suffer a serious dilution to its equity base. The shares will sell at a current market price of around \$13 as compared to a book value of \$21. Something like 15 percent of the company will thus be sold for approximately \$25 million, or the price of one 747.

- Although the technology exists, the present inability of the U.S. airline industry to finance a new generation of aircraft prevents the manufacturers from moving beyond the design stage. It is clearly in the national interest, however, and in the interest of the air traveler and the airline industry, to take advantage of of such gains:
  - Greater noise reduction: A new technology aircraft would sound about three times quieter than a nonretrofitted 707, and twice as quiet as a retrofitted 707.
  - -- Greater fuel efficiency: In the period from 1981 (when the first new-technology aircraft would be introduced under the accelerated-replacement program) until 1986 (when all new-technology replacement aircraft would be delivered) the total savings in jet fuel is estimated to amount to about 2.5 billion gallons.
  - -- Productivity: Measured against existing aircraft, a new-technology aircraft would offer greater payload for its size and weight, would be more reliable and more easily maintained, and would cost less to operate and less to acquire per unit of productivity.
- D. The Declining Prospects of the U.S. Aerospace Industry (Detail in Appendix B).
- The United States achieved its prominence in the world aerospace market because of its technical superiority; most important civil aviation advances historically have been made in U.S. products. But lack of orders for a new plane has virtually stalled technical development since the widebody jets were introduced. Newer foreign aircraft such as the A-300-B show the potential for meeting certain market demands which current U.S. products cannot (i.e. efficient operation over short-medium range routes). This, combined with declines in U.S. Government outlays for aircraft and engines, has already had serious consequences for U.S. airframe and engine manufacturers, a major source of employment and export sales.
  - -- Real industry sales have declined 37 percent.
  - -- Employment has declined 37 percent.
  - -- Aerospace exports as a percent of GNP have declined 42 percent.
  - -- Each \$30 million lost in sales translates into a loss of 1,000 full time jobs and \$15.5 million in payroll.

While the U.S. industry shrinks in real terms, foreign aerospace manufacturers -- spurred by Government subsidy -- are growing larger, more capable technologically, and more agressive. It is conceded that the U.S. cannot continue to hold its present 80 percent market share (of world civil aircraft in operation). The question of how large a share European and other foreign manufacturers take will depend in part on how long U.S. production of a new aircraft is delayed. A 2- to 3-year acceleration of the present timetable could be very important in that it would allow U.S. manufacturers to produce a new generation of planes when U.S. airlines will need them and when new foreign products will be on the market.



#### THE WHITE HOUSE

WASHINGTON
July 16, 1976

MEMORANDUM FOR:

JIM CANNON

FROM:

JUDITH RICHARDS HOPE

SUBJECT:

Secretary Coleman's Aircraft Noise Proposal

The "Noise" proposal dated July 2 (and containing revisions of July 9), is a revision of Bill Coleman's draft proposal submitted in early June. This draft was outlined by you for the President on June 9; a copy of your memorandum is attached at Tab A.

After OMB inter-agency staffing, Paul O'Neill asked Bill Coleman to address two additional issues: (1) How this policy comports with his Concorde SST decision; (2) The inflationary impact of the plan.

I had some serious questions about the proposal, which are included in my memorandum to DOT Deputy General Counsel, Don Bliss, attached at Tab B.

The current proposal is basically the same as the draft proposal except that the Airport Trust Fund is tapped for noise retrofit of two and three engine aircraft.

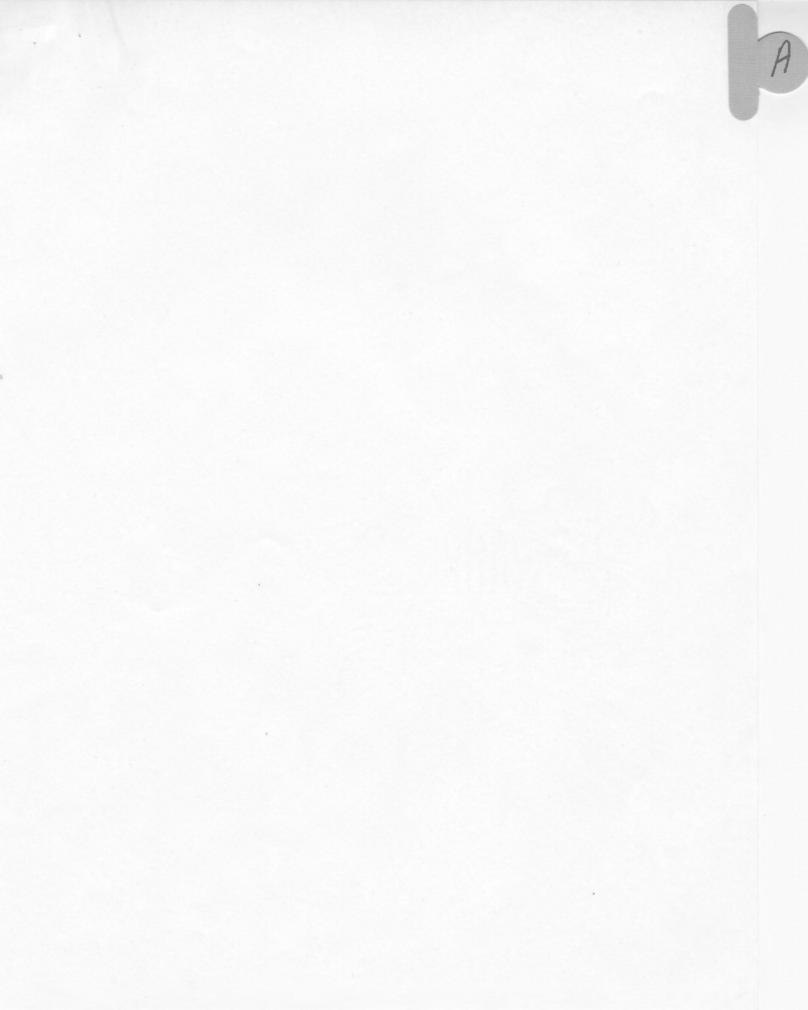
The basic pros on this policy are:

- -- Positive action on the noise problem;
- -- Revitalization of the aircraft industry with "found dollars" (with over \$1 billion in the Airport Trust Fund, Coleman predicts that Congress will move to cut the air ticket tax by 2%; therefore, we could propose the cut and simultaneously allow a 2% surcharge directed to solving the noise problem by replacement or retrofit)
- -- Creation of tens of thousands of jobs, especially in the aircraft manufacturing states;
- -- Strengthening our aircraft industry, 2nd most important factor in our international balance of payments picture, needed in light of increased competition from France and Germany.

The basic cons on this policy are:

- The proposed financing, administered by an Air Transport Association pool, would require some kind of exemption from the anti-trust laws. Such an exemption cuts against the philosophical grain of our aviation regulatory reform proposals.
- -- Once a 2% surcharge pool is set up, it is likely to go on forever, providing a permanent federal government subsidy to aviation.
- -- The proposal would not have an impact on noise until 1982-85.
- -- The DOT statistics are shaky on whether even, if no Federal action were taken, the noise problem would be significantly improved by airlines' normal replacement of older (noisier) aircraft.
- -- The proposed policy financially benefits Pan-Am and TWA more than other carriers, yet they are not subject to many of EPA's noise standards since their flights operate mostly overseas.





#### THE WHITE HOUSE

WASHINGTON

June 9, 1976

MEMORANDUM FOR THE PRESIDENT

FROM:

JAMES M. CANNON

SUBJECT:

Secretary Coleman's Aviation Noise Policy

Because of substantial public and Congressional pressure for federal action to reduce aircraft noise, Secretary Coleman has personally conducted a series of meetings with concerned groups and prepared an Aviation Noise Policy that establishes a limited federal role while emphasizing the primary local responsibility of airport owners and local governments in controlling aircraft noise in communities surrounding airports.

#### The Problem

Airport noise is a serious problem at several of the major airports in the country (Los Angeles, New York, Boston), and a serious annoyance for 6 to 7 million Americans. The problem is compounded because of a number of damage suits against airports by residents in the surrounding areas and also by the fact that airport operators are beginning to impose restrictions on the use of airports (curfews, jet bans) which may disrupt the interstate flow of air travel, interfere with federal safety and air traffic control responsibilities, and pose an undue burden on interstate commerce. Secretary Coleman promised members of Congress and the public that he will announce a policy that addresses these issues in June. (Complete cooperation among Executive Branch agencies will be required to enable the Secretary to meet his June 21 deadline. Secretary Coleman would appreciate your support in meeting this deadline. He recognizes that additional modifications to the policy may well be necessary and DOT staff stands ready to work closely with OMB in making whatever improvements are needed.)

## Background

77 percent of the airplanes flying in the United States today do not meet existing federal noise standards because they were manufactured before the effective date of those standards. The industry will be flying some of these planes into the 1990's.

The Noise Policy proposes that most aircraft be required to meet federal noise standards within 6 to 8 years after the enactment of legislation that would authorize a user charge to help pay for bringing the aircraft into compliance. There are two ways the air carriers may meet this requirement: (a) they can retrofit existing airplanes with sound absorbing material or (b) they can replace existing airplanes with newer aircraft.

For the newer airplanes, retrofit is the cheapest and most reasonable. For the older 4-engine jets (B-707, DC-8) replacement has many other advantages that are in the national interest. These include:

- -- A substantial boost to the economy of the aerospace industry;
- -- The development of new aviation technologies for export; (the second most important contributor to the U.S. balance of payments.)
- -- More jobs each billion dollars in aircarft sales employs 32,000 people.
- -- Energy conservation new planes would offer 20-30% improved fuel efficiency.

## Financing - Coleman Recommendation

Since there is a suplus in the Airport Development Trust Fund of more than \$1 billion Secretary Coleman suggests that we propose legislation to reduce the ticket tax by 2% (from 8 to 6%), thus enabling air carriers to impose a surcharge -- without raising overall fares significantly -- in order to raise revenues that would be used for the replacement or retrofit of noisy aircraft. This financing formula would have the additional benefit of stimulating the aeronautical manufacturing industry and promoting new aviation technologies. Although the precise financing formula needs to be worked out with OMB, the Secretary's preferred option would be to authorize the collection of a surcharge on the ticket which would be managed by the air carriers with little federal involvement.

If Coleman's recommendations are adopted without modification, the total cost would be approximately \$3.580 million, financed almost exclusively by user charges.



subject file

#### THE WHITE HOUSE

WASHINGTON

June 30, 1976

MEMORANDUM FOR:

DON BLISS

FROM:

JUDITH RICHARDS HOP

SUBJECT:

Proposed Aircraft Noise Policy:

Some Suggestions

#### SUMMARY

I think we need:

- 1. Better statistics on which to base our forecast of the noise problem in the future.
- 2. To separate out the noise problem from the questions of the desirability and need to revitalize our aerospace industry, complete with the international implications, the job creation potential, and the need to maintain this industry as part of our national defense.
- 3. To conform our policy with the assumptions on which the Aviation Act of 1975 is based (statistically and philosophically).
- 4. To consider an alternate method of financing whatever we decide must be done, such as tax credits for environmental purposes plus a "jawbone" encouraging that the credits be used to replace rather than retrofit.
- 5. To recognize that the ticket tax will and should be cut, therefore, leadership in that area, (we recommend it) again with a possible jawbone that reduced air fares yield more traffic yield increase profits and, hopefully, kick off the next round of aircraft purchases.
- 6. To consider a program which does not clobber the previously efficient carriers, such as Delta, at the expense of inefficient carriers, such as TWA and which does not grant the lions share of the funds available to two international carriers, Pan Am and TWA, which carriers garage most of there noisy fleet overseas, and, indeed, under the present state of the proposal may not be required to meet the noise standards in any event.

#### DISCUSSION

In accordance with our discussion yesterday, I call your attention to a number of questions and concerns of mine.

- The DOT/FAA/ATA Statistics on noisy aircraft which will be operating ten years from now - about the time when the proposed noise policy would, if adopted, begin to have a substantial impact - may be misleading. Paul Ignatius' testimony on the Hill in February would indicate that many of the noisy aircraft will no longer be in service by 1985; For example, he states at page 6 that airlines tend to retire their planes prior to the end of the book life of the planes. The Bowing-707's are now approximately ten years old. of them meet the FAR 36 standards but, their book life is estimated to be between ten and fifteen years, mostly fourteen to fifteen years. Thus, by 1985 they are likely to be phased out in any case without any retrofit or help from the United States government. Similar examples can be found throughout Ignatius' testimony. A careful statistical analysis may cause us to change our forecast on the noise problem. first suggestion, then, is that we should look at the numbers again, carefully. However, even if we change our forecast as to the degree of the noise problem ten years hence, I think we must address the noise problem, for example by mandating that all planes flying in 1985 or 1986 must meet FAR 36 (with exceptions for international aviation.)
- 2. We can then address the question, separately, of whether the Federal Government should finance or subsidize in any way the meeting of this noise standard. It might be helpful to look at tax incentives to industry to comply with environmental laws. I believe, for example, that scrubbers on industry smoke stacks have been granted accelerated depreciation status, although this would have to be checked. It occurs to me that the proposed pooling arrangement, which requires an exemption from the antitrust laws and also seems to be an unprecedented governmental assist to the airline industry (while we have given no such assistance, for example, to the auto industry in meeting ever tightening emission standards) is cause for great concern. Instead could we propose that the Treasury reverse its recent decision that aircraft should be written off over twelve, rather than six, years and write the change in such a way that accelerated depreciation would be given only (a) to those planes purchased to replace noisy planes; (b) to the retrofit used to quiet noisy planes; and/or (c) require that those

companies choosing to replace rather then retrofit be allowed to accelerate depreciation only on those planes which replace noisy planes actually retired. (This limitation might help to avoid the traditional plague of the airline industry, excess capacity.) Moreover, we could state at the time of announcing this financing proposal that we hoped thereby to stimulate the aircraft industry and urge airline companies to consider seriously buying new equipment rather then retrofiting old equipment.

3. If, as most people believe, the ticket tax is going to, and should, be decreased anyway, I think the Administration should propose this decrease and submit legislation decreasing it by two or three percent. This legislation could be accompanied by a statement that we hope thereby to assist the air consumer in obtaining lower fares, and to assist an essentially elastic industry to increase business, hence capital, which can be used to purchase badly needed new equipment.

I think it is troublesome to tie a two percent tax reduction to a two percent surcharge for noise - when much of the pool created by such a surcharge would be used to replace aircraft rather than simply solve the noise problem.

cc: Art Quern
Paul O'Neill



THE WHITE HOUSE
WASHINGTON
July 16, 1976

MEMORANDUM FOR:

JIM CANNON

FROM:

JUDITH RICHARDS HOPE

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